



CDC's Second National Report on Human Exposure to Environmental Chemicals

Spotlight on Cotinine

What Cotinine Is

- Cotinine is a “metabolite”—or breakdown product—of nicotine. It forms in the body when a person is exposed to nicotine.
- Nicotine is one of the chemicals found in tobacco smoke and chewing tobacco.
- Nicotine gets into people’s bodies if they smoke or chew tobacco, if they are involved in tobacco production and must handle tobacco, or if they are exposed to secondhand tobacco smoke (also called environmental tobacco smoke, or ETS).
- Levels of cotinine in the body track the amount of exposure a person has to tobacco smoke.

Levels of Cotinine Found in the U.S. Population

- For the *Second Report*, scientists tested blood samples for levels of cotinine people selected at random to be representative of nonsmokers in the United States.
- The *Second Report* shows that cotinine levels in nonsmoking Americans have gone down by more than 70% since the early 1990s. Levels have decreased by 58% in children, by 55% in adolescents, and by 75%. These results are encouraging.
- The *Second Report* also includes results showing differences in cotinine levels between different groups of people. Levels in adolescents and children were more than twice the levels measured in adults. Non-Hispanic blacks had higher levels of cotinine than did either non-Hispanic whites or Mexican Americans.

For More Information

- Centers for Disease Control and Prevention, Tobacco Web site: www.cdc.gov/tobacco/index
- U.S. Environmental Protection Agency (EPA), Office of Air and Radiation Secondhand Smoke/Smoke-Free Homes: <http://www.epa.gov/smokefree/>

- U.S. Environmental Protection Agency, Office of Air and Radiation. Asthma Triggers—Secondhand Smoke: <http://www.epa.gov/iaq/asthma/triggers/shs.html>
- National Cancer Institute, Cancer Information System (CIS)
Environmental Tobacco Smoke Fact Sheet: http://cis.nci.nih.gov/fact/3_9.htm
- To view CDC's *Second National Report on Human Exposure to Environmental Chemicals*, go to CDC's Web site at www.cdc.gov/exposurereport. You may also send an E-mail to ncehdls@cdc.gov and ask for a copy of the *Report*, call toll free at 1-866-670-6052, or write to the following address:
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January 2003

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